UNITED STATES PATENT OFFICE.

WALTER ZETZMAN, OF CORNELIUS, OREGON.

PISTON-RING REMOVER.


Application filed August 31, 1918. Serial No. 252,156.

To all whom it may concern:

Be it known that I, WALTER ZETZMAN, a citizen of the United States, residing at Cornelius, in the county of Washington and State of Oregon, have invented new and useful Improvements in Piston-Ring Removers, of which the following is a specification.

This invention relates to new and useful improvements in piston ring removers and the principal object of the invention is to provide a device for quickly and easily compressing the rings in their grooves in the piston so that the said piston may be removed or replaced in the cylinder.

Another object of the invention is to provide a device of this character which is simple and durable in construction, reliable and efficient in operation and one which can be manufactured and placed upon the market at a minimum cost.

The invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a perspective view of the device.

Fig. 2 is a sectional view showing the device in use.

As shown in these views the device consists of a body part 1 which is made in the form of a split sleeve, the side opposite the slit being extended to form a point 2. I prefer to make the lower end of this sleeve of curved formation with the curve beginning at the end of the slit and extending downwardly to the point opposite the slit. The upper end of the sleeve is provided with a handle 3 of substantially U-shape.

As shown in Fig. 2, the point of the device is pushed under the points of the ring and pressed downwardly until the ring is forced from its groove in the piston. The ring can then be removed by simply withdrawing the device from around the piston. It will be understood that either one or all of the rings can be removed or replaced by the device.

I prefer to make the device of tough spring steel which must be rolled out very thin.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:

A piston ring remover comprising a cylindrical shell provided at one end with a handle and having its other end diagonally cut away whereby to provide a lateral opening and a depending point, said depending point being engageable between a piston ring and its groove whereby upon longitudinal and lateral movement of said shell said shell may be disposed in encircling relation to the piston between the piston and its ring for expanding the ring and removing the same from its groove, the lateral opening permitting the lateral movement of the shell for engagement upon the piston, and said cylindrical portion of the shell being substantially of the same length as said cut-away portion whereby said shell may be slid a considerable distance onto said piston.

In testimony whereof I affix my signature.

WALTER ZETZMAN.